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CHINA: AGRICULTURAL TRADE PROSPECTS

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FOREWORD

A delegation of the U.S. Senate Committee on Agriculture, led by me with Senators Robert Stafford and Thomas Daschle, traveled to the People's Republic of China (PRC) and Hong Kong on August 13–31, 1988. A full list of those in the delegation is contained in the appendix. Major objectives of the delegation included the following:

—to assess the problems and prospects of U.S. agricultural trade with the PRC and Hong Kong;

—to assure consumers in both areas of U.S. determination to remain a reliable supplier of their agricultural needs; and

—to review the changes in economic policy and political leadership in China and their implications for U.S. agricultural trade.

The delegation also had a special interest in assessing Chinese environmental protection efforts and willingness to cooperate in bilateral and multilateral efforts to help safeguard the international environment so important to productive agriculture. The delegation also addressed other important issues involving human rights in Tibet, Chinese foreign policy, and prospects for Hong Kong's stability and prosperity as the British prepare to return the colony to Chinese sovereignty.

This committee print focuses on agricultural questions which figured prominently in talks with senior leaders of China's National People's Congress and Ministry of Foreign Economic Relations and Trade in Beijing; in discussions with local Chinese officials; in conversations with Chinese farmers during visits to several farms, including a new dairy farm near the city of Xian, and a peasant village outside Lhasa, Tibet; and in discussions with prominent U.S. business leaders and Hong Kong government officials in Hong Kong.

In the PRC, the delegation was the guest of the National People's Congress, which under the direction of its vice chairman, Chen Muhua, provided gracious hospitality and unflagging support during the six stops in China. Outside of Beijing, the National People's Congress shared its responsibility with the provincial and municipal people's congresses in the areas visited. U.S. Ambassador Winston Lord and his staff, and U.S. officials in Shanghai, Chengtu, Gwangzhou, and Hong Kong also provided excellent support to the delegation throughout its stay.

Preparations for the official trip included the collection of extensive briefing materials involving responses to specific questions and supporting memorandums and tables provided by the U.S. Department of Agriculture concerning U.S. agricultural trade with the

PRC and Hong Kong. Some of these materials have been attached as an appendix to this report.

PATRICK J. LEAHY,
Chairman, Committee on Agriculture,
Nutrition, and Forestry.

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OBJECTIVES

The serious drought in the United States raised concerns in the PRC about the ability of the United States to meet export demand. The delegation repeatedly reassured Chinese officials and leaders in Hong Kong that the United States is determined to remain a reliable supplier of agricultural products to both markets. Delegation members reviewed with the Chinese the damage caused by the recent drought in the United States. However, with large U.S. food and fiber reserves, it was made clear that there would be no substantial impact on the ability of the United States to meet the needs of foreign markets as well as the domestic U.S. consumers now and in the future. Chairman Leahy underlined to the Chinese officials that despite the U.S. Presidential election, there was strong bipartisan support in the United States for increased agricultural trade with China. Chairman Leahy also reiterated to leaders in China and Hong Kong that there is no support on the Senate Committee on Agriculture or among U.S. political leaders for the use of embargoes in U.S. agricultural trade.

Chairman Leahy, Senator Daschle, and the other members of the delegation discussed with leaders in China and Hong Kong various means to improve the quality and quantity of U.S. grain and other agricultural exports. The Chinese responded that they did not intend to pursue policies aimed strictly at self-sufficiency in agricultural production. They indicated that as long as U.S. farm products were competitively priced and of high quality that market opportunities would exist for U.S. farmers.

CHINA

Chinese officials emphasized their continued strong interest in purchasing U.S. grain, especially wheat, so long as the price remained competitive. They said that China had already bought 5 million tons of U.S. grain in 1988 and that 3 million tons had been delivered. They expressed concern that the U.S. drought would raise U.S. prices which would hurt the competitiveness of American products in the China market. The delegation assured the Chinese that U.S. products, especially under the Export Enhancement Program (EEP), would remain price competitive. Indeed, while the delegation was in Beijing, the U.S. Department of Agriculture announced that an additional 2 million tons of wheat would be made available to the PRC under the Export Enhancement Program.

Quality remains an issue that could prevent U.S. exporters from meeting long-term potential. A representative of the Chinese Ministry of Agriculture in Beijing also told the delegation of Chinese concern with presence of *Tilletia Controbersa Kuhn* (TCK) in ship-

ments of U.S. wheat to China. TCK is a smut found in wheat in the United States that is not generally found in Chinese wheat. Fear of spreading this disease has limited U.S. wheat sales from the Pacific Northwest to China in recent years—adding shipping costs for U.S. exporters. The delegation expressed strong concern that U.S. grain shipments remain of high quality. They asked the Chinese to be sure that information of lower quality shipments is passed quickly to U.S. officials so that appropriate steps to maintain quality control can be taken promptly.

U.S. officials from the Foreign Agricultural Service (FAS) have recently attempted to address Chinese quality concerns by sending technical teams to meet with end-users of grain in the PRC. In the past, FAS officials met primarily with the central grain purchasing agencies within the Chinese Government. This tended to place more emphasis on price rather than quality since end-users of the grain were not directly involved in the negotiations.

Chinese Reform and Implications for U.S. Agricultural Trade

The price and quality of U.S. agricultural products will remain important determinants in the ability of U.S. farm exporters to enter the China market. But Chinese officials made clear to the delegation that the United States and other foreign sales also will be closely tied to other internal factors: the growing productivity of Chinese agriculture; the ability of China to earn foreign exchange needed to purchase goods from abroad; the growing size of the Chinese population (about 15 million a year); and the growing popular demands for more and higher quality food.

Recent Trends in the Chinese Rural Economy

Gross agricultural output in China rose 4.7 percent in real terms last year, up from 3.4 percent in 1986, largely because of a strong performance in cash crop production. Grain production reached 402 million metric tons (MT), up 3 percent from 1986, but still below the record harvest of 407 million MT in 1984 (see figure 1). After 2 years of being a net grain exporter, China last year resumed its status as a net importer of grain, purchasing approximately 16 million MT—primarily from Canada, Australia, and the United States. Grain production in 1988 was expected by Chinese officials to fall short of 1987 levels due to a series of weather problems, especially for spring-planted crops. The delegation was told that China's lagging grain production is in part a reflection of the success of reforms in the rural sector. For example, after achieving double-digit growth rates in the early 1980's through a combination of favorable weather, increased financial incentives for peasants, and implementation of household-based farming, Beijing loosened central controls over peasants in 1985, allowing them to produce crops of their choice after fulfilling contractural obligations to the state for grain production. At the same time, Beijing relaxed state controls over the prices of nonstaple foodstuffs such as vegetables, fruit, and meat. Free market prices for cash crops soared, while the state dropped grain prices to avoid another grain surplus the size of that in 1984. Cash crop production consequently began to draw an increasing share of China's farmland, and as a result, cash crop

output gains have far outpaced increases in grain production. Low feed grain prices also encouraged peasants to raise livestock. However, the ensuing jump in meat production in 1985 and 1986 reduced the profitability of producing livestock and led to last year's return to rationing of pork (see table 1).[1]

State investment in agricultural infrastructure has continued to decline both in real terms and as a share of total capital construction expenditures, and neither local government agencies nor peasants have taken up the slack. Beijing has permitted local officials to exercise greater autonomy in deciding how to allocate state investment funds in rural areas—and rural officials often have chosen to develop profitable rural industries on farmland rather than to make investments in agricultural infrastructure projects. Meanwhile, peasants have invested their savings in housing or consumer goods, fearing that changes in Beijing's agricultural policies might deprive them of benefits from infrastructural investments. Thus, total farmland has decreased and improvements needed in rural infrastructure have been lacking.

Tight grain supplies in 1987 were also the result of a continuing rise in consumer demand, as rapidly rising incomes raised purchases of a variety of foodstuffs requiring grain inputs. Strong demand for bread, beer, cooking oil, meat, and eggs has strained supplies of high-quality grains, oilseeds, and feed grains. To dampen demand and minimize inflationary pressures, Beijing has resumed the practice of issuing ration tickets for such food products as eggs and sugar in several major cities.

The delegation was told that in contrast to grain, China's rural industrial output posted strong growth in 1987. Indeed, rural industry and commerce are among the most dynamic segments of the Chinese economy, and now employ about 15 percent of China's labor force—more than 85 million—as opposed to only 10 million in the late 1970's. Rural industrial output grew by 36 percent in 1987, in real terms, and rural industries earned $5 billion from exports—about 15 percent of China's total export earnings.

Economic Policy in 1988

Beijing has announced a modest reform agenda for this year that postpones crucial but politically sensitive price reform pending reductions in the inflation rate, increases in grain output, and improvements in enterprise efficiency. Premier Li Peng announced in mid-February—and reaffirmed in his report to the National People's Congress in March—that China's top economic priorities in 1988 would be controlling inflation and improving agricultural output.

In the agricultural sector, the delegation was informed that Beijing is undertaking several major initiatives designed to stimulate grain production:

—Raising purchase prices for grain produced and sold under state contracts. Beijing intends over time to phaseout the current dual-track agricultural pricing system either by reducing the share of grain procured under contracts and in-

[1] See pages 10 and 11 for figure 1 and table 1.

creasing free market transactions, raising the prices the state pays for contract grain, or instituting price differentials based on quality with the aim of eventually selling high-quality grain at free-market prices.

—Increasing state investment in fertilizer and pesticide production, in transportation and distribution networks, and in agricultural infrastructure projects such as irrigation. Beijing is concentrating rural loans as well as state investment on grain production. Beijing may also invest tax revenues collected from nonfarm rural land use in agriculture.

—Allowing peasants to purchase and transfer land-use rights, which would permit more efficient, larger scale operations. Beijing also recently lengthened the leasing period for rural farmland from 15 to 30 years. These measures are designed to give farmers a greater stake in the land's upkeep.

—Encouraging peasants to use better seed strains and more tractors and other agricultural machinery in production. Beijing has introduced several state-sponsored S&T initiatives in the last few years that are designed to improve productivity by providing training and funds to rural areas.

It was clear to the delegation that Beijing is sensitive to the inflationary impact that substantial increases in grain purchase prices could induce and is searching for ways to minimize costs that must be borne by urban consumers. At the same time, Beijing recognizes that it cannot continue to increase subsidy payments, which are already a substantial drain on the state budget. A variety of possibilities are under consideration and will likely be the subject of continued debate.

Thus, 1988 has seen only slow progress in the reform of the purchase price of grain . Chinese officials told the delegation that the state purchase price for grain remained 50 percent lower than the market price. Moreover, briefings from U.S. embassy officers, discussions with Chinese officials, and concurrent Chinese press accounts all pointed to a shortfall in China's expected grain output in 1988, especially on account of serious drought in some regions and floods in others. In particular, the Chinese press announced in late August that the summer grain output barely kept pace with last year's level, even though a larger area was sown than in 1987. The Chinese press also said that prospects for the fall harvest were questionable because of drought and flood affecting areas throughout the country and because less land was sown for the fall crop than in 1987. China had expected to produce 410 million tons of grain in 1988, after a harvest of a little over 400 million tons of grain in 1987.

Over the longer term, Chinese officials told the delegation that agricultural production should continue to rise in the years ahead. They cited target figures of 450 million tons of grain by 1992 and 500 million tons by the year 2000. They also said there would be concurrent improvements in meat production, which has seen some ups and downs in recent years and has led to a return to rationing of pork in some Chinese cities. U.S. officials also judge that China's agricultural output will increase, although the pace of improvement is thought to be considerably lower than the rate of 9 percent annually, reached in the 1979–84 period of agricultural reform.

PROSPECTS FOR UNITED STATES-CHINA AGRICULTURAL TRADE

During the Maoist period strictly regimented "command" policies resulted in substantial inefficiency in and mismanagement of the agriculture sector. In 1978 there began a major economic revolution under Deng Xiaoping using elements from a market economic system, including policies designed to reward farmers for their work and stimulate agricultural production. These policies:

—increased incentives through market-based farm prices;
—established free rural markets;
—reduced centralized control;
—permitted farm wages to be set based on work quality;
—altered the nature of rural organization from communes to family farms, allowing more freedom in production and marketing; and
—permitted contracting of state land to individuals.

These policies resulted in sharp increases in agricultural production and rural incomes, some reduction of rural/urban inequities and a shift in emphasis away from food grains toward cash crops. There was also a major increase in rural and small town industrialization.

The spurt in growth of agricultural production resulting from reforms began to peter out in 1984; the growth rate has since reverted closer to prereform levels. A major problem has been a sharp decline in investment in critical infrastructure (water projects, storage, processing and distribution systems). Individual investment is constrained by policy uncertainties, i.e., will incentives remain in place?

How to improve the agricultural situation is a subject of intense internal debate with widely varying views. Some seek a return to aspects of a command; others argue that reform has not gone far enough. Currently there has been little resolution of this debate.

Demand.—While production has begun to level off, wages have continued to rise. As would be expected in a developing country, the elasticity of demand for high quality food (bread, milk, and meat) remains very high. With rising wages and only modest gains in food output recently, considerable inflation has resulted. Satisfying pent-up urban food demand is a major cause of China's recent return to the grain import market in a big way. In the longer term the need for food imports will be strongly affected by the results of the current policy debate and its effect on domestic production.

Trade policy.—China's development (and foreign exchange) priority has been on building up urban industry. There is a great concern about trade deficits and thus a strong bias against imports. As a result, U.S. and Chinese officials do not see China substantially increasing its reliance on agricultural imports. Thus, the potential for China to become a major factor in world grain markets in magnitude similar to the Soviet Union does not appear likely. However, some observers of the political scene believe that to maintain social cohesion China is prepared to divert foreign exchange from urban industrial development to satisfy urban food demand. In addition, exports have been rising rapidly (likely to exceed $50 billion in 1988), providing the necessary foreign exchange to sustain in-

creased food imports. Importantly, the Chinese do not have an explicit goal to be self-sufficient in all major foodstuffs—a common practice in many developing countries. This should provide some opportunity for U.S. agricultural exports to balance long-term Chinese needs in specific markets where the U.S. maintains a comparative advantage.

Opportunities for U.S. Exports

The delegation was informed that the main possibilities for increased U.S. agricultural exports to China appear to lie with wheat, feed grains, and perhaps soybean oil. However, Chinese officials made clear to the delegation that China is a very price sensitive buyer, and substantial sustained increases are not likely. Near-term sales will be highly dependent on price and EEP availability.

Wheat.—China will be an importer of wheat through the year 2000, and U.S. officials estimated imports at 21 million metric tons (MT) by then. U.S. sales are very price sensitive; the average 25 percent U.S. market share over 15 years fell to 0.6 percent in FY 1986. This bounded back to 14 percent in FY 1987, and an estimated 25 percent in FY 1988 only because of EEP. (U.S. EEP wheat sales to China this year were 7.2 million MT.) High U.S. prices this year due to drought and uncertainty over the level of EEP funding make forecasting future sales difficult.

Corn.—While China is a net corn exporter (competing in Japan with the United States), certain regions import corn. While U.S. exports of corn to China have declined in FY 1988, decreasing corn production in China and increased use of feed lots to meet rising meat demand point to good long-range prospects if U.S. corn is competitively priced.

Soybeans.—China is both an importer and exporter of soybeans. The United States regained a share of the market in FY 1986 and in FY 1987 providing 250,000 MT of the 273,000 MT imported. However, opportunities for growth appear limited because of expected increases in China's domestic production.

Vegetable oil.—Rising incomes have resulted in soaring demand for vegetable oil: China is the second largest importer after India. The United States, however, has not exported soybean oil to China since 1985, due to competition from South American countries.

Cattle, hides, and skins.—China's dairy production is increasing rapidly, but only a fraction of demand is met. Health requirements have kept U.S. dairy cattle exports minimal. The European Economic Community (EEC) has an advantage through its financing of local dairy cooperative development projects, but the U.S. Holstein-Friesian Association says it could make substantial dairy cattle sales if health problems are solved. China is an important market for U.S. semifinished leather and raw hides, with strong potential for increase as living standards improve.

Animal protein meal.—As consumption and production of poultry and livestock products increases there is increased potential for U.S. exports for feed.

Tallow.—The rendering industry in China is poorly developed, and imports of tallow for soapmaking were 750,000 MT in 1986. The U.S. share was 9,500 MT. The National Renderers Association

has increased its promotion efforts in an attempt to gain market share for the United States.

Cotton.—China is a major exporter of cotton and markets it aggressively in competition with the United States. China imports some cotton—the Congressional Budget Office forecasts the U.S. share at 100,000 bales per year through 1993. Long-term growth potential appears weak due to strong production potential in China.

HONG KONG

In contrast to the complicated variables surrounding U.S. agricultural trade with China and some other Asian countries, the growth of U.S. farm exports to the 6 million people of Hong Kong has been relatively smooth and steady. U.S. officials informed the delegation that Hong Kong is the second largest importer of high-value/value-added agricultural products in Asia and the fifth largest market for total U.S. agricultural exports among the 18 Asian countries (after Japan, South Korea, Taiwan, and the PRC). The value of U.S. agricultural exports to Hong Kong has increased from (U.S. dollars) US$206 million in 1976 to US$466 million in 1987, more than double in 10 years. On a per capita basis, Hong Kong's 6 million people consumed US$77 worth of U.S. farm products in 1987.

Of all U.S. agricultural exports to Hong Kong, poultry meats, oranges, ginseng, and tobacco are leading items. Exports of U.S. fresh fruits alone add up to over US$150 million a year and account for about one-third of the total U.S. agricultural exports to Hong Kong. Out of all U.S. fresh produce exported offshore, Hong Kong takes about one-fifth of the citrus fruits, noncitrus fruits, and vegetables. The territory is among the top three U.S. markets for oranges, grapes, prunes and plums, melons, tomatoes, cabbage, celery, lettuce, peppers, apples, sweet cherries, and onions. Hong Kong, with probably the highest per capita consumption of fresh oranges in the world, imported 93,355 MT of fresh oranges from the United States in 1987. Fresh cherries, prunes, and plums have done exceedingly well and the volumes have multiplied over the past 5 years.

Poultry meats which added up to US$54 million topped the list of U.S. agricultural exports to the territory in 1987. Chicken alone accounted for US$52 million. Hong Kong is the largest U.S. market for shell eggs and exports in 1987 totaled US$6 million.

The market for U.S. cotton has declined in the past few years due to the contraction of the local textile industry and lower prices for Chinese and Pakistani cotton. However, the territory has recently emerged as a promising market for U.S. mink skins. U.S. exports of undressed mink furskin to Hong Kong jumped from less than US$0.5 million in 1978 to more than US$6 million in 1986 and surged to a new record of US$13 million in 1987. Hong Kong is now the largest U.S. mink skin export market. Imports of both dressed and undressed U.S. mink skins totaled over US$30 million in 1987, double the 1986 level.

U.S. ginseng picked up 35 percent in 1987 over 1986 exports and recovered the previous 1982 record level. U.S. wild ginseng is much sought after in this market. Tobacco has shown steady growth in

Hong Kong since the early 1970's, and has tripled in the last 5 years. Hong Kong imported US$242 million in cigarettes in 1987.

The trend of increasing sales of U.S. farm products to Hong Kong is expected to continue over the next few years. Per capita incomes in Hong Kong are the third highest in Asia next to Japan and Singapore and a significant portion is spent on food. While the Hong Kong food market is segmented between the largely western-oriented institutional trade (including hotels, restaurants, and modern-style supermarkets) and the traditional Chinese market, there is a growing overall awareness of the high quality and availability of American foods.

Many of Hong Kong's leading restaurants and hotels insist on serving high quality U.S. beef, chicken, turkey, eggs, and a wide assortment of fruits and vegetables. This is particularly significant with the rapid development of the hotel business in both Hong Kong and China. It is important to note that about 4.5 million tourists visited Hong Kong in 1987. A number of Hong Kong hotels have been invited to venture into China's hotel projects and have been importing food and beverages for these hotels. These Hong Kong partners are important agents in introducing western foods to China.

There is also potential for growth in the sale of U.S. grocery line items as the number of new retail food outlets continues to increase rapidly. Because of traditional ties and advantageous freight rates, most of Hong Kong's grocers have looked to Australia, New Zealand, and Europe for supplies. In recent years, however, those buying habits have shifted and American items are now available on the shelves. While the Hong Kong dollar is pegged to the U.S. dollar at US$1.00 equals HK$7.80, the recent decline of the U.S. dollar against the currencies of some suppliers has helped to increase the competitiveness of American products.

With the growing presence of Americans in Hong Kong and the increasing westernization of Hong Kong consumption habits (the number of U.S. passport holders now exceeds U.K. passport holders), grocery stores are showing increasing interest in U.S. grocery products. More than US$10 million worth of beer and ale was exported to Hong Kong, compared to US$2.8 million in 1985 and US$8.8 million 1986, due to aggressive marketing of current U.S. brands. U.S. exports of shell nuts (including pistachios, almonds, and Macadamia nuts) increased 60 percent over 1986. U.S. ice cream exports of US$3.4 million are up 200 percent over 1986 and 20 times the 1983 level. Frozen vegetables, led by french fries, rose significantly.

The local Chinese market (i.e., 5.7 million out of 6 million people) is changing rapidly. This is especially true among the young, many of whom are opting for western lifestyles and eating habits. This, coupled with the higher per capita incomes, is starting a trend toward the consumption of higher quality foods and meats, as well as sandwiches and convenience foods. McDonald's, Pizza Hut, Burger King, Kentucky Fried Chicken, and Spaghetti House franchises have grown so fast in number over the past few years that they are now part of the street scene of Hong Kong. These shops have a special appeal to the younger Chinese consumer, a factor especially significant for the future.

U.S. companies should be aware that Hong Kong is also the staging base for an increasing number of agribusinesses in China. In addition to hotels, joint ventures include: dairies, hog farms, feedmills, and food processing. A number of international agricultural companies have offices in Hong Kong to operate their joint ventures, to look for new ventures, and to trade.

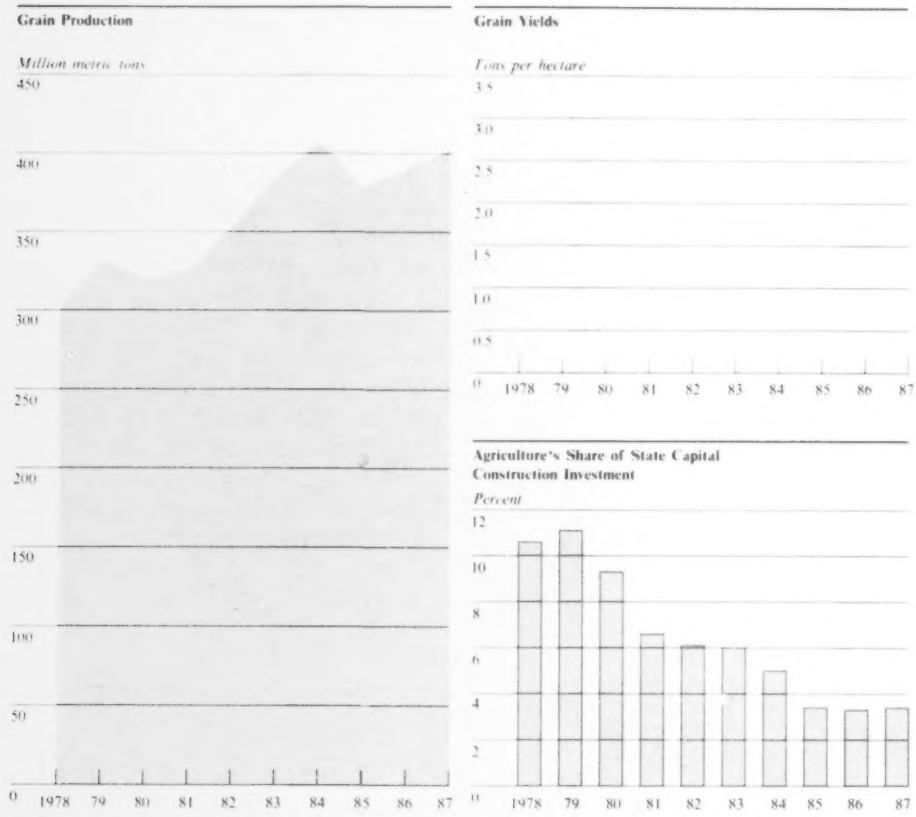
U.S. Agricultural Promotion Efforts

Delegation members were briefed in Hong Kong about U.S. Government supported efforts to encourage the sale of a wide range of agricultural products in the Hong Kong market and throughout East Asia and the Pacific. Chairman Leahy asked those making preparations to provide the committee with concrete examples of which promotional efforts have been most successful and which have been less successful. The Chairman and the other Senators also strongly agreed with those present that the U.S. Government should take steps to ensure that the quality of U.S. grain shipments remained uniformly high. They also judged that more aggressive international promotion of the expanding and efficient production of U.S. agriculture was in the interests of the United States and world consumers.

Tables 2 and 3 [2] provide major U.S. agricultural exports to Hong Kong for CY 1983–87 in value and quantity, respectively.

[2] See pages 11 and 12 for tables 2 and 3.

Figure 1
China: Trends in Agriculture, 1978-87



Source: Official Chinese statistics and US Department of Agriculture.

TABLE 1.—CHINESE OUTPUT OF MAJOR AGRICULTURAL CROPS, 1987

	Million metric tons	Percent of change from 1986
Grain	402.4	+2.8
Cotton	4.2	+18.4
Oil-bearing crops	15.3	+8.1
Sugarcane	46.9	−6.7
Fruit	15.5	+15.1
Pork	17.8	−.9
Beef and mutton	.2	+16.9
Aquatic products	9.4	+14.1

Source: China's State Statistical Bureau

TABLE 2.—VALUE OF MAJOR U.S. AGRICULTURAL EXPORTS TO HONG KONG, CY 1983–87

[In thousands of U.S. dollars]

Commodity	1983	1984	1985	1986	1987
Poultry meat	23,922	34,470	40,353	38,119	54,366
Oranges	67,457	52,064	64,244	70,367	49,106
Ginseng	38,708	37,145	36,883	29,805	40,794
Raw tobacco	10,198	24,968	30,557	28,928	36,408
Cotton	38,745	85,191	17,800	1,970	18,325
Wheat	18,844	18,247	15,269	13,977	16,149
Beverages bases	7,142	3,256	4,616	13,321	15,272
Apples	14,214	15,105	14,330	12,432	13,545
Furskins (undressed)	2,800	3,611	5,288	6,158	13,263
Grapes	8,083	9,944	15,234	14,508	11,013
Beer and ale	3,618	2,238	2,894	8,794	10,545
Beef, frozen and fresh	4,738	4,314	4,071	6,370	10,204
Prunes and plums	2,395	5,016	5,551	7,556	9,789
Cattle hides	4,516	2,498	3,384	4,029	6,037
Shell eggs	3,091	4,389	4,080	3,734	5,716
Lettuce	5,687	4,753	4,188	4,225	4,632
Cherries	1,641	2,169	2,063	3,020	4,603
Melons	3,146	3,295	4,788	4,192	4,214
Lemons	3,344	3,575	2,927	3,082	3,880
Potatoes: french fry frozen	2,551	2,194	2,613	3,366	3,647
Rice	71	56	86	786	3,528
Refined corn oil	3,290	5,583	5,909	3,252	3,487
Ice cream	115	528	884	1,123	3,480
Subtotal	253,268	320,470	288,012	283,114	342,003
Total all U.S. agriculture exports	357,131	411,467	388,669	395,836	466,008

Note.—In addition, the territory imports significant amounts of cigarettes and dressed mink skins from the United States. Hong Kong imported about US$16 million of dressed skins and US$242 million worth of cigarettes from the States in 1987.

Source.—U.S. Census Bureau.

TABLE 3.—QUANTITY OF MAJOR U.S. AGRICULTURAL EXPORTS TO HONG KONG, CY 1983–87

Commodity	1983	1984	1985	1986	1987
Poultry meats (MT)	25,169	33,404	41,687	36,043	56,051
Oranges (MT)	127,274	95,383	115,135	127,282	93,355
Ginseng	300	226	407	384	491
Raw tobacco (MT)	1,705	3,915	5,196	5,618	7,088
Cotton (MT)	30,584	61,691	12,781	2,732	14,970
Wheat (1,000 MT)	110	113	99	98	125
Beverage base (MT)	498	404	402	842	1,122
Apples (MT)	26,922	28,039	25,921	19,863	26,329
Undressed furskins (1,000 pcs)	114	111	195	304	352

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TABLE 3.—QUANTITY OF MAJOR U.S. AGRICULTURAL EXPORTS TO HONG KONG, CY 1983–87—Continued

Commodity	1983	1984	1985	1986	1987
Grapes (MT)	6,897	9,058	14,194	14,007	9,173
Beer and ale (1,000 litres)	6,364	4,133	5,733	15,256	17,145
Beef, fresh and frozen	740	667	647	1,068	2,019
Prunes and plums	2,038	5,441	6,643	7,056	11,073
Cattle hides whole (1,000 pcs)	160	63	106	117	122
Shell eggs (1,000 dozen)	6,595	6,924	7,009	6,067	9,614
Lettuce (MT)	18,444	15,973	13,635	11,142	11,308
Cherries	659	1,168	1,243	1,671	1,952
Melons (MT)	4,865	6,335	9,627	8,147	7,499
Lemons (MT)	5,397	5,741	5,054	5,574	7,136
Potatoes: french fry frozen	3,738	3,338	3,725	4,945	5,454
Rice	176	120	186	2,613	11,595
Refined corn oil (MT)	3,304	5,725	6,987	4,967	4,487
Ice cream (1,000 litres)	167	688	1,217	1,735	5,601

Note.—MT—metric tons.

Source: U.S. Census Bureau.

APPENDIX

DELEGATION LIST

SENATORS

Senator Patrick J. Leahy	D-Vermont
Mrs. Marcelle Leahy	
Senator Robert T. Stafford	R-Vermont
Mrs. Helen Stafford	
Senator Thomas A. Daschle	D-South Dakota
Mrs. Linda Daschle	

OFFICER OF THE SENATE

Walter J. Stewart, Secretary of the Senate

SENATE STAFF (alphabetically)

Neal J. Houston, Administrative Assistant, Office of Senator Stafford
Georgia Joyal, Scheduler, Office of Senator Leahy
Ellen McCulloch-Lovell, Administrative Assistant, Office of Senator Leahy
Eric Newsom, Legislative Director, Office of Senator Leahy
Jan Paulk, Director, Office of Interparliamentary Services
Charles Riemenschneider, Staff Director, Agriculture Committee
Dr. Robert Sutter, Chief of the Foreign Affairs and National Defense Division of the Congressional Research Service

DEPARTMENT OF STATE

Sheldon Krebs, Legislative Management Officer for East Asia

DEPARTMENT OF DEFENSE

Col. Edward W. Shaw, U.S. Army Senate Liaison Office
Maj. Lester M. Dyke III, U.S. Army Medical Corps
SSgt. Kevin Bremer
Sgt. Ronald Damico

SUMMARY AGRICULTURAL FACT SHEET
People's Republic of China--1985

A. AREA AND POPULATION (1985)
Total Area - 9,600(000 Kms) Cultivated - 106 (Mil. Ha.) Cultivated - 11%
No. of rural households - 191 million
Total Population - 1045 (Mil.) %Rural - 80.2
Working Population - 499 (Mil.) % in Agriculture - 74.3

NATIONAL INCOME AND PRODUCTION (1985)
GNP - 264,600 (Mil. $U.S.) GAP - 156,000 (Mil. $U.S.) %Agriculture - 59.0
Per Capita Income - $253 ($U.S.) % Growth in GNP - 12

B. TOTAL FOREIGN TRADE (Latest year)	1979-82 Avg.	1983	1984	1985
	(Billion U.S. Dollars)			
Total Imports from all countries	19.1	21.4	27.4	42.3
Total Exports to all countries	19.0	22.2	26.1	27.4
Total BOT	(0.1)	0.8	(1.3)	(14.9)
** Total Imports from USA	1.8	2.8	3.0	3.9
** Total Exports to USA	0.6	1.7	3.1	4.2
Total w/USA	(0.6)	(1.1)	0.1	0.3
% Total Imports from USA	9	13	11	9
% Total Exports to USA	3	8	12	15

C. AGRICULTURAL TRADE (latest year)	1982	1983	1984	1985
	(Million U.S. Dollars)			
Agr. Imports from all countries	NA	NA	4269	4086
Agr. Exports to all countries	NA	NA	5479	6196
Agric. BOT	NA	NA	1210	2110
** Agr. Imports from USA	1722	780	907	497
** Agr. Exports to USA	170	143	192	197
Agric. BOT w/USA	(1552)	(637)	(715)	(300)
% Agr. Imports from USA	NA	NA	21	12
% Agr. Exports to USA	NA	NA	4	3

** Source: U.S. Census Bureau

D. MAIN AGRICULTURAL IMPORTS AND VALUE (million U.S. dollars) 1985
Wheat, $875; Logs, $819; Wool, $348; Sugar, $282

MAIN AGRICULTURAL EXPORTS AND VALUE (MILLION U.S. DOLLARS) 1985
Corn, $756; Cotton, $438; Tea, $306; Soybeans, $266; Silk, $257; Rice, $229

KEY AGR. PRODUCTS PRODUCED OF TRADE INTEREST (PRODUCT, 000 M.T., % SELF-SUFFICIENCY)
Wheat, 85.8 MMT - 93%; Rice, 168.6 MMT - over 100%; Cotton, 4.15 MMT - over 100%;
Sugar, 6.0 MMT - 87%; Corn, 63.8 MMT - over 100%; Soybeans, 10.5 MMT - over 100%

SOURCE: Statistical Yearbook of China, 1986; Chinese Customs data, and official data published in press.

Exchange rates: 1975-81, RMB 1 = U.S.$1.49 1984, RMB 1 = U.S.$2.33
(Chinese official) 1982, RMB 1 = U.S.$1.85 1985, RMB 1 = U.S.$2.94
1983, RMB 1 = U.S.$1.98

SUMMARY OF AGRICULTURAL TRADE
People's Republic of China--1985
(Million U.S. Dollars)

Commodities in Descending Order of Importance	Latest Year: 1985 Agricultural Imports *Total	**From U.S.	%U.S.	Commodity	Latest Year: 1985 Agricultural Exports *Total	**To U.S.	%U.S.
Wheat	875	97	11	Corn	756	0	0
Wool	348	0	0	Cotton	438	--	--
Sugar	282	0	0	Tea	306	18	6
Rubber	131	0	0	Soybeans	266	--	--
Vegetable oils	87	12	14	Silk	257	3	1
Animal fats & oils	34	0	0	Rice	229	--	--
Dried beans	17	0	0	Canned veg.	206	51	25
Cocoa beans	17	0	0	Live swine	178	--	--
Corn	12	0	0	Rabbit fur	176	--	--
Barley	4	0	0	Frozen pork	167	0	0
Coffee	3	0	0	Canned pork	144	0	0
Jute & hemp	1	0	0	Veg. oil	113	1	--
				Peanuts	110	--	--
Total	1844	149	8	Cashmere	88	3	3
				Fresh veg.	82	0	0
Wood products				Fruit	81	2	2
Logs/Lumber	819	328	40	Goatskins	59	0	0
Paper pulp	211	20	9	Live poultry	55	0	0
				Down	46	16	35
Total	1030	348	34	Fresh/froz. beef	46	0	0
GRAND TOTAL	4086	497	12		6196	197	3

--Refers to less than $1 million.

Net trade, all countries $2110
Net trade, U.S. $(300)

* Based on exchange rate of RMB 1 = 2.94
** Source: U.S. Census data.

SUMMARY AGRICULTURAL FACT SHEET
People's Republic of China --1986

A. AREA AND POPULATION (1986)
Total Area - 9,600(000 Kms) Cultivated - 96 (Mil. Ha.) Cultivated - 10%
No. of rural households - 196 million
Total Population - 1057 (Mil.) %Rural - 80.2
Working Population - 493 (Mil.) % in Agriculture - 77.1

NATIONAL INCOME AND PRODUCTION (1986)
GNP - 271,098 (mil. $U.S.) GAP - 114,162 (Mil. $U.S.) (up 3.5% compared to 1985)
% Agriculture - 42.1 Per Capita GNP - $259 ($U.S.) % Growth in GNP -7.8

B. TOTAL FOREIGN TRADE (Latest year)	1979-83 Avg.	1984	1985	1986	Preliminary 1987
		(Billion U.S. Dollars)			
Total Imports from all countries	19.6	27.4	42.3	42.9	43.2
Total Exports to all countries	19.6	26.1	27.4	30.9	39.5
Total BOT	--	(1.3)	(14.9)	(12.0)	(3.7)
** Total Imports from USA	2.0	3.0	3.9	3.1	3.5
** Total Exports to USA	0.8	3.1	4.2	5.2	6.9
Total w/USA	(1.2)	0.1	0.3	2.1	3.4
% Total Imports from USA	10	11	9	7	8
% Total Exports to USA	4	12	15	17	18

C. AGRICULTURAL TRADE (latest year)	1983	1984	1985	1986	1987
		(Million U.S. Dollars)			
Agr. Imports from all countries	NA	4080	3882	4036	5400
Agr. Exports to all countries	NA	4982	6245	7087	8100
Agric. BOT	NA	902	2363	3051	2700
** Agr. Imports from USA	780	907	497	62	363
** Agr. Exports to USA	143	192	197	200	237
Agric. BOT w/USA	(637)	(715)	(300)	138	(126)
% Agr. Imports from USA	NA	22	13	2	7
% Agr. Exports to USA	NA	4	3	3	3

** Source: U.S. Census Bureau

D. MAIN AGRICULTURAL IMPORTS AND VALUE (million U.S. dollars) 1986
Wheat, $809; Logs, $608; Wool, $494; Sugar, $215

MAIN AGRICULTURAL EXPORTS AND VALUE (MILLION U.S. DOLLARS) 1986
Corn, $608; Cotton, $516; Aquatic products, $486; Edible oils, $479; Tea, $333

KEY AGR. PRODUCTS PRODUCED OF TRADE INTEREST (PRODUCT, 000 M.T., % SELF-SUFFICIENCY)
Wheat, 90.3 MMT - 92%; Rice, 172.2 MMT - over 100%; Cotton, 3.54 MMT - over 100%;
Sugar, 5.8 MMT - 79%; Corn, 70.9 MMT - over 100%; Soybeans, 11.6 MMT - over 100%

SOURCE: Statistical Yearbook of China, 1987; Chinese Customs data, and official data published in press.

Exchange rates: (Chinese official)
1975-81, RMB 1 = U.S.$1.49
1982, RMB 1 = U.S.$1.85
1983, RMB 1 = U.S.$1.98
1984, RMB 1 = U.S.$2.33
1985, RMB 1 = U.S.$2.94
1986, RMB 1 = U.S.$3.46
1987, RMB 1 = U.S.$3.71

SUMMARY OF AGRICULTURAL TRADE
People's Republic of China--1986
(Million U.S. Dollars)

Commodities in Descending Order of Importance	Agricultural Imports Latest Year: 1986			Commodity	Agricultural Exports Latest Year: 1986		
	*Total	**From U.S.	%U.S.		*Total	**To U.S.	%U.S.
Wheat	809	6	1	Corn	608	0	0
Wool	494	0	0	Cotton	516	--	--
Sugar	215	--	--	Aquatic products	486	--	--
Rubber	166	0	0	Edible veg. oil	479	--	--
Other veg. oils	100	0	0	Tea	333	16	5
Edible veg. oils	84	0	0	Soybeans	295	0	0
Cocoa beans	73	--	--	Fresh/pres. veg.	277	--	--
Corn	66	4	6	Raw silk	239	3	1
Soybeans	62	19	31	Canned vegetables	236	50	21
Hides & skins	59	16	27	Live Swine	196	0	0
Animal fats & oil	26	3	11	Rice	190	--	--
Dried beans	22	--	--	Fresh/frozen pork	182	0	0
Barley	19	0	0	Peanuts	153	--	--
Jute & hemp	15	0	0	Canned pork	144	0	0
Coffee	8	0	0	Rabbit hair	133	--	--
				Fruit	91	3	3
Subtotal	2219	48	2	Hog bristles	85	11	13
Total	3223	62	3	Chestnuts	70	--	--
				Live poultry	70	0	0
Wood Products				Salted pig casings	65	2	3
Logs/Lumber	608	180	30	Cashmere	65	2	3
Paper pulp	205	28	14	Honey	64	11	17
				Sugar	54	--	--
Total	813	208	26	Goat skins	50	--	--
				Down	48	22	46
				Subtotal	5129	120	2
GRAND TOTAL	4036	270	7		7087	200	3

-- Refers to less than $1 million.
* Based on exchange rate of RMB 1=3.46
** Source: U.S. Census data.

Net trade, all countries $3051
Net trade, U.S. $ 138

China

(Prepared by Francis C. Tuan, Economic Research Service, U.S. Department of Agriculture)

SUMMARY

China's agriculture, producing mainly rice, wheat, corn, pork, and vegetables to feed over 1 billion people, has made impressive progress in raising output levels and productivity in the 1980's through recent rural reforms. The reforms implemented since the end of 1978 have been very effective and conform with the primary long-term policy goal of China's agricultural sector to raise per capita production and living standards. Although the value of agricultural output in 1985 was 3.5 times over that of 1952, agriculture's contribution to the country's total output value (consisting of agriculture, industry, construction, transportation, and commerce) declined from 45 percent in 1952 to about 28 percent in the mid-1980's. In the last few years, agricultural reforms have increased China's ability to feed and clothe its people and even temporarily shifted the country to a net grain exporter in 1985 and 1986. However, China, with the world's biggest population and limited opportunity to expand arable land, is expected to become a more important U.S. overseas farm market in the future.

THE ECONOMY

China has been ruled by the Chinese Communist Party since the establishment of the country in 1949. The country's economy, largely modeled on the Soviet Union's centrally planned system through the end of the 1970's, has been vitalized by the reduction of rigid government controls. Currently, the economy is heading toward a more market-oriented system.

Per capita GNP, roughly $300 as estimated by the State Statistical Bureau is similar to that of many developing countries. However, China differs by its uncharacteristically high individual savings rates and heavy investment in the industrial sector. Agricultural production was tightly controlled by the central government from 1949 to the late 1970's, as in the industry, through rigid planning. Research results reveal that agricultural productivity grew little during this period because of inferior rural organizational structure, poor management, and misallocation of scarce agricultural inputs such as arable land and capital. In addition, China faced bottlenecks in other sectors of the economy such as energy and transportation.

In the mid-1980's, a series of readjustments have been made to restructure the industrial and agricultural sectors and to deal with inflation caused by price reforms and other economic programs such as subsidies on crop procurements and elimination of government fixed prices of livestock products. Given the problems and readjustments, relatively slow growth of the economy and its GNP is expected for the next several years.

Despite a slowdown in the pace of reforms because of readjustment and recent disputes on reform validity with anti-reformers, the party seems to be determined to continue overall economic re-

forms and to maintain an open door policy to the rest of the world. However, China likely will continue to have a one party socialist state for the next several decades.

THE AGRICULTURAL SECTOR

China's agriculture, characterized by its huge population and limited arable land, has one of the largest agricultural sectors in the world. The sector employs 312 million laborers, 62.5 percent of the total labor force, and produces mainly rice, wheat, corn, pork, and vegetables to feed the country's more than 1 billion population.

Growth of agricultural production generally was slow over a long period of time prior to recent reforms, particularly in terms of per capita output. Eight years after reforms were implemented, total grain output increased 28 percent over 1978, of which wheat production grew 65 percent. Total meat rose nearly 140 percent over the same period. China is now the biggest grain producer in the world and its red meat output ranks second behind the United States. Although per capita grain availability and meat consumption in China still rank low by world standards, rural reforms have currently elevated the country's agricultural production to its goal of self-sufficiency in food supply, that China has strived for about 30 years. The increases in grain output also helped China to shift from a net grain importer to a net exporter in 1985 and 1986. China's agriculture currently contributes about 41 percent to national income, nearly the same as that of the industrial sector.

POLICY GOALS

More specifically, the goals of China's economy have been to (1) raise per capita production and living standards, (2) maintain sustained growth to become an industrial country, and (3) provide political security for the country.

For nearly 30 years, China first emphasized and invested heavily in industrial development. As a result, the country has created a comprehensive heavy industry which is unusual for a country at China's stage of development. Industry is now the largest sector of the economy. Nevertheless, rapid development of industry was costly—living standards rose very slowly, and poor planning and lack of incentives led to large-scale waste of resources and only limited growth of productivity.

China's priorities have changed sharply since 1979. Policy now favors raising living standards and stresses expansion of agriculture and industrial production of consumer and export commodities. This new direction conflicts with the existing structure of industry and therefore changes have been made during the last several years. The major changes include:

- Sharp cuts in the government budget and cancellation of major construction projects, particularly in heavy industries.
- Closing of many small plants, particularly those that are inefficient users of energy and scarce raw materials.
- A much lower rate of investment and a major shift of investment toward light and export industries.

- A slowdown in growth of foreign trade, particularly in commitments for purchase of large plants, consumer goods, and agricultural products.

In the 1950's and early 1960's agricultural policies had two dimensions: promoting both a socialist and a technical transformation of agriculture. The socialist transformation refers to strengthening state and collective forms of ownership and gradually moving agriculture toward a system of nationally owned state farms, equivalent to industrial firms. Technical transformation involves ongoing infusion of modern technology and use of modern inputs. Both are viewed as essential to the sustained growth of farm production and improvement in living standards. During the Cultural Revolution (1966–76), government policies stressed self-sufficiency in grain production, use of farm labor in capital construction projects, non-material incentives and rigid central planning. Relatively large emphasis was placed on the socialist transformation.

Policies implemented since the late 1970's emphasized regional crop specialization, more balanced growth among agricultural subsectors, greater investment in science and technology, more reliance on material incentives, and less direct central control. Furthermore the commune system has been dismantled. Under these policies, emphasis has shifted to the technical side of agricultural development in order to raise agricultural productivity and efficiency. Expansion of rural markets, emphasis on individual self-interest and higher incomes, and limits on the role of the collectives are part of a temporary downgrading of the socialist transformation of agriculture. Such a shift in policy will likely remain for some time.

Agricultural products have long been an important part of China's exports and China has historically been a net exporter of farm commodities. Major farm exports include rice, live animals and animal products, fruits and vegetables, and a variety of specialty products such as tea and spices. China's agricultural imports have been limited to a narrow range of products. For a period of time three items—grain, cotton, and sugar—account for the largest share of purchases, particularly in the early 1980's. While imports were up in the early 1980's, China never made a full commitment to continued growth of agricultural imports. Larger grain imports were used to support urban consumption, freeing greater amount of grain purchased by the Government from the countryside for support of areas shifting acreage from grain to cash crops. The Government appears to view rising farm imports as a threat to the growth of industrial and technology imports. Long range agricultural plans have also put a high priority on development of farming areas which will market the surplus portion of their grain output. It is hoped that this would increase government supplies and hold down future growth of grain imports.

AGRICULTURAL PROGRAMS

Numerous measures have been implemented since the late 1970's to increase rural income, agricultural output, and marketing of farm products. Programs initiated to expand rural income include

increase in government procurement prices in 1979 for grains and livestock products, enlargement of private plots in poor areas in 1981, and resumption of rural trade markets (known as free markets previously) at the beginning of reforms. These have stimulated farmers' enthusiasm to produce more farm output, even while still under the commune system. Rural income, as a result, has risen sharply. After dismantling the commune system at the end of 1984, the Central Government reduced the quantity of goods purchased through the state procurement system in the following year. Farm households now sell output to both Government and in local markets. Grain, oilseeds, and livestock products are now available from rural trade markets all over the country.

To increase food supply, the Government has relaxed regional self-sufficiency goals to allow farmers to specialize in crop growing and livestock raising activities. The policy was supported initially by Government programs guaranteeing grain allocation to farm households which, for example, specialize in cotton production. This program together with others, such as granting fixed-price fertilizer as a bonus, providing subsidized feed grains to farmers who sell live animals to the Government, and lifting fixed prices on livestock products, have all raised the farmers' incentive to increase agricultural production as well as productivity.

Starting from 1979, the Chinese Government embarked on a revolutionary program to reorganize farm production units and change rural institutions to revitalize the rural economy. The program included disbanding the commune system and instituting a contract system that provided an environment in which farm households could initiate production activities, make economic decisions, and allocate resources to raise output, reduce costs, and maximize income. Farm families responded positively, and output and income have risen sharply.

Before the reforms started, there were only a few regular marketing programs, including a government procurement and rationing system to facilitate the circulation of farm products. Since tremendous progress has been made in agricultural production, particularly from 1982 to 1984, China started introducing various programs to support the movement of agricultural commodities not only within counties, provinces and the country, but also to international markets. Private transport of agricultural products is now permitted between provincial boundaries. Food processing and feed manufacturing have also been encouraged by the Government.

In the early 1980's, China signed trade agreements with many countries to import grains, oilseeds, and cotton. These agreements helped create an economic environment conducive to rural reforms. An obvious example was the increase in grain imports in the early stages of the reforms in order to provide food supply to urban areas which left more grain output in rural areas to allow farmers to specialize on cash crop and livestock production activities. After a series of bumper harvest years, especially since 1985, the Government has assisted to facilitate its agricultural output, such as corn, oilseeds, and cotton to be exported to the international markets to earn foreign exchange.

The increased grain output in 1983 and 1984 had also triggered China's ambitious feed production plans and livestock sector devel-

opment programs. China sought to buy equipment and technology to produce more and better feed. During the last several years, China has also signed animal quarantine procedures with several countries to import quality animal breeding stock for improving meat and other animal product production in the future.

AGRICULTURAL PROGRAM EVALUATION

China's agriculture is in transition from an economy run administratively to one in which market forces play an increasingly important role. Before recent reforms were implemented, increases in overall agricultural production barely kept up with population growth.

For the last 8 years, higher yields generated almost all of the growth in production of grain crops. Total cultivated areas continued to decline. Yield increases for wheat, rice, and coarse grains were rapid, largely because of greater and more efficient use of inputs such as chemical fertilizer, improved varieties, better farm management, and more specialization. These changes have been basically the results of the new policies, programs, and measures that have been implemented since 1979.

China is undergoing a food revolution in the 1980's. Rising farm production and, as a result, higher income have led to major changes in the level and composition of goods. Not only per capita grain consumption (quantity) continues to increase, but also the amount of rice and wheat in consumer's total grain consumption (quality) reportedly increased more than 60 percent since 1978.

Total oilseed output has also grown rapidly since reforms were initiated, although growth leveled off in 1985–86 because of planned declines in cottonseed output. On a national scale, per capita availabilities of edible vegetable oil doubled in the last couple years as compared with 1978. As incomes rise, urban and even some rural consumers are shifting from animal fat to vegetable oils. However, with about 40 percent of the total oilseed output entering commercial channels, much of China's oilseed products is consumed in urban areas. The Government provides urban residents 6 kilograms of vegetable oil annually at a subsidized price.

Growth in cotton production has been dramatic during the early period of reforms. Before 1982 China imported huge quantities of cotton to meet the rapid growth of its textile industry. Since 1983, China has become a net cotton exporter and competes with the United States in the Asian markets. Pricing programs have played an important role in this big change. China deliberately lowered the level of procurement prices in 1985 and 1986 and, as a result, cotton output declined sharply. Other cash crops, including fruits and vegetables also grew significantly because of increases in procurement prices in the first half of the 1980's.

Livestock product consumption grew markedly as well, although per capita availabilities are still low compared with world averages. Pork output has contributed to most of the increase in recent years despite rapid growth in poultry, eggs, and milk output in the mid-1980's. Future growth of livestock products will largely depend upon the availability of domestic grain supplies.

Labor productivity has made some impressive gains, particularly because rapid development of rural industries facilitated the rural labor force to leave farming activities. Per capita net income of farmers also increased over twofold since reforms started. Peasants have invested heavily in housing, farm equipment such as small tools, and hand-guided tractors.

Agricultural commodities marketed through rural trade markets have steadily increased not only in volume but also in quality. More and leaner meat, grain, fruits, and vegetables are now readily available in the markets, because farmers are enthusiastic to get involved in rural trade, and earn more cash income.

Agricultural production for the rest of the 1980's and the 1990's will proceed at a slower pace than in the early 1980's. The largest part of the positive impact of new policies, particularly of the responsibility system, has already taken place and the growth of input supplies, particularly good quality fertilizer and other chemicals, will be much slower than in the early 1980's. Opportunities for shifting area from grains to cash crops appear to be largely exhausted. Arable area has continuously declined in the 1980's because of non-farm use and China's leaders are becoming increasingly concerned about this trend. Sustaining the momentum of the 1980's in the phase of these developments will be a major challenge to current leaders. A number of specific problems are currently important:

Marketing system.—Recently, the Government announced its intention to eventually eliminate the procurement system. Other measures which prevent farm households from marketing their produce not only outside of their own jurisdictions but also in other provinces will also be eliminated. So, while institutional changes are underway, farm prices are still administratively set or controlled by the Government. There is not a good way to accurately estimate the impact on production, because of price and policy changes. This increases uncertainty about the level of agricultural production and is an important reason for China's rising interest in studying the U.S. agricultural marketing system and price support programs.

Planning and management.—While the Government still maintains certain control through China's decentralized planning system, it now must rely more on price adjustments and other indirect levers of control to guide lower-level decisions to increase agricultural production. How to reform agricultural prices and to use price support programs, subject to government budgetary constraint, will be a difficult challenge for the Government in modernizing the agricultural sector. Therefore, how to relate agricultural planning at the central government level with the management decisions made at the farm level will be critical to China's agricultural development.

Land use.—Large amounts of farmland, much of it high quality, have been lost since the late 1970's to urban and industrial uses. Opportunities for land reclamation are limited and costly. Land zoning and planning programs and other means of reducing the loss of high quality agricultural land will be critical to China's future agricultural production.

Energy shortage.—This has long been a serious problem in rural areas. Use of crop residues for heating and cooking affects soil fertility. The search for fuel also accelerates deforestation, increases soil erosion, and adds to the risk of flooding. Growing mechanization has also added a new dimension to rural energy problems, as supplies of electrical power and diesel fuel are frequently short. Given the country's slow growth in energy output for the rest of the 1980's, rural energy supplies and consumption will become an increasingly critical issue.

Infrastructure.—The lack of domestic transportation capacity to transfer agricultural commodities domestically in recent years has become a big concern of the country, particularly after agricultural production increased sharply. In addition, storage capacity and the ability to process agricultural products have also been limited. All these have been a major reason that China started exporting grains in the north in the last couple of years while importing grains in the south. Given continuous agricultural development and regional specialization, China needs to vigorously invest in the development of its infrastructure to alleviate transfer, storage, and processing problems.

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Market Opportunity Summary

(Prepared by the Foreign Agricultural Service, U.S. Department of Agriculture)

China, 1988

China is likely to be an increasingly important market for U.S. agricultural exports in 1988 and through the rest of this decade. Rising incomes, greater demand for diversified, high-quality diets and products, growing pressure on the government to provide these goods through increased production and/or imports, and an im-

proved situation in China's foreign exchange situation should result in numerous opportunities in China for U.S. agricultural exports in 1988. If official promises to improve the foreign investment climate are implemented, additional opportunities could arise for U.S. agricultural businesses interested in joint ventures in most agricultural areas.

GRAINS AND OILSEEDS

Imports of wheat in 1987 recovered from the low levels of the mid-1980's. China also resumed limited purchases of corn and soybeans, and boosted imports of vegetable oils to record levels. While Chinese import demand will continue to depend somewhat on weather, the primary forces affecting trade levels are growing consumer demand for better and more diverse agricultural products, and shifts in production and trade policies.

Strong government efforts to develop the livestock industry will raise the minimum amount of feed grains needed to maintain existing herds, and probably keep feed grain needs above production levels even in good years. Unending efforts to conserve foreign exchange should combine with larger livestock numbers and a greater awareness of animal nutrition to increase China's demand for soybeans and meal. Along with more and better meat, rising incomes are causing consumers to diversify their diets, demanding more and better breads—giving a boost to wheat imports. Potential for increasing wheat imports is especially good in southern China where people primarily consume rice. Rising incomes also are boosting vegetable oil consumption from its low levels leading to substantial imports. As is the case for virtually all imported commodities, the success of U.S. exporters in supplying a substantial portion of Chinese import demand will depend foremost on their ability to offer products at competitive prices.

LIVESTOCK AND BYPRODUCTS

Chinese efforts to improve livestock quality will provide opportunities for U.S. exports of breeding stock, and certain livestock byproducts. With special efforts on expanding milk production, producing leaner pigs, and increasing chicken broiler and layer production, exporters of these animals could find a welcome market here. There are also opportunities for exporting bovine semen and embryos. There also appears to be growing interest in meat and bonemeal as a substitute for fishmeal in animal feed, and an expanded use of tallow in the production of fine toilet soaps.

Wealthier consumers are demanding finer clothes and accessories along with better diets. A market may be developing for good quality leather items such as shoes and handbags. Western leather technology currently enjoys a substantial advantage over Chinese leather technology (e.g., the manufacture of waterproof leather). The export of other raw materials such as mohair for blending with other fibers may also provide opportunities.

SEEDS

China's continuing interest in increasing yields of virtually all agricultural products makes it an important potential market for

improved seed varieties. In addition, interest in preserving and expanding forage area presents opportunities for forage seed exporters, while urban pressure to grow more grass beside buildings and along roadsides in cities presents opportunities for turf seed exporters.

FOREST PRODUCTS

Though currently officially discouraged for use in construction, there is a very high demand for wood products in China which is forbidden expression due simply to lack of supplies. Chinese officials estimate that black marketers cut as many trees as are cut under the State Plan. Already an important market for U.S. logs, China has great potential for becoming an even more important market if government officials and end users could be persuaded of its merits. In forest products, as with virtually all the other commodities mentioned here, foreign exchange is the primary limiting factor.

HIGH VALUE PRODUCTS

The growing number of international tourists staying at joint venture hotels should provide a small but consistent market for certain high value products. These joint venture hotels and Chinese luxury hotels present a possible opportunity for U.S. meat exporters (primarily beef), although competition from Oceania is very keen in this area. Though far beyond the economic reach of the general population, these hotels are expected to provide high quality fare, such as top quality meat, wines, fruits, nuts, and other condiments. Becoming established in this market may serve an added use of introducing the commodities to the top Chinese officials. The first Western-style fast food restaurant opened in China late in 1987, and more outlets are expected. These restaurants also may stimulate demand for high value products.

Market Opportunity Summary

(Prepared by the Foreign Agricultural Service, U.S. Department of Agriculture)

South China, 1988

DAIRY, LIVESTOCK AND POULTRY

A. *Swine.*—Rising incomes in the prosperous Pearl River delta area of South China and changing tastes have resulted in a rise in demand for lean pork. In 1987, after 2 years of significant imports of American pig breeding stock, imports to South China fell off. Lack of foreign exchange, and quarantine and health problems in imported herds resulted in some reluctance to import. However, the demand for swine breeding stock still exists and 1988 imports are possible.

B. *Dairy and beef livestock.*—Rising incomes have also translated into an increased demand for milk. As a result, in 1985 and 1986 South China imported a significant number of bred heifers from the USA. However, as in the case of pigs, no American dairy cows

were imported into South China in 1987. Yet, imports (with the aid of EEP) are a possibility in 1988. On the beef side, at least one large joint venture farm near Guangzhou is interested in importing beef breeding stock to raise quality meat for the South China hotel industry. Although the Philippines or Australia are also likely sources, small imports from the USA are a possibility. Australia and Canada are strong competitors with the USA for China's breeding cattle import sector.

C. *Poultry.*—Interest in American layer breeds which are more productive and produce larger eggs than Chinese breeds continued robust in 1987 and a healthy demand for day old chicks will likely continue through 1988.

D. *Semen and embryos.*—There is a market in South China for U.S. dairy and swine semen. Limited interest also exists in the importation of embryos. China and the USA agreed upon a bovine semen and embryo trade protocol in July 1986. A protocol for swine semen is yet to be negotiated. Our principal competitors in this market are Australia, New Zealand, Canada and West Germany.

E. *Meat and bone meal.*—China imports several 100,000 metric tons of fish meal annually. The NRA is working to demonstrate to animal husbandry the cost advantage of substituting meat and bone meal for fishmeal. Joint venture feed mills in South China, especially in Guangdong Province, with western or Hong Kong managers, are already aware of this advantage. Thus, exports of meat and bone meal to South China may start up in 1988.

FEED GRAINS

Growth and increased profits in the dairy, pig and chicken businesses of South China have resulted in demand for more and better mixed and compound feed. Corn and soybeans, two essential ingredients of compound feed, are not grown in South China. Some corn and soybeans will be supplied by North China. However, due to limited domestic supplies, and China's underdeveloped transportation infrastructure, South China will have to look to foreign markets to supply a good part of its feed grain deficit.

FOOD GRAINS

There have been five EEP wheat programs announced for China since early 1987, each for 1 million mt (the last one for 1.2 mmt). Thus, 1988 prospects for U.S. wheat exports to China are bright. Much of the American wheat will no doubt be earmarked for consumption in South China. South China has traditionally been a rice consuming region, but tastes are changing and demand for wheat products is growing for the same reason that the demand for milk, milk products and lean pork is growing, i.e., disposable incomes are on the rise. Western style bakery products are beginning to sell well up and down the Pearl River Delta corridor.

PROCESSED AND FRESH FOODS

There is a small but growing market in South China for processed foods, U.S. red meats, wines and fresh fruits, especially apples and oranges. The importation of fresh fruit from the United States was discontinued in 1983 due to concern over the Mediterra-

nean fruit fly. Efforts are currently underway to obtain permission for renewed imports. The demand for these products comes mainly from the tourist/business class hotels. Not only foreigners eat at these hotels. As the number of prosperous Cantonese grows, so does local patronage of western hotel restaurants. Competition for these markets comes from Australia, New Zealand and Western Europe.

SEEDS

The fruit, vegetable and ornamental plant industry in southern China is growing. The climate in South China is suitable for year around production of these horticultural products. Demand for good fresh produce, fruit and ornamental plants is growing along with the hotel/tourist industry. The Hong Kong market for fresh produce is nearby as well. Thus, considerable interest exists in improved vegetable, fruit and ornamental plant seeds. With promotion, the U.S. seed industry could establish a market here. Competition is strong from Western Europe. Currently the Netherlands has a good part of the market.

U.S.-PRC Agricultral Scientific and Technical Cooperation

(Prepared by the Office of International Cooperation and Development, U.S. Department of Agriculture, July 6, 1988)

DESCRIPTION OF PROGRAM

The U.S.-China agricultural scientific and technical cooperation program operates under the Memorandum of Understanding on cooperation in Science and Technology between the United States and the People's Republic of China. Representatives of the Chinese Ministry Agriculture and the U.S. Department of Agriculture, Office of International Cooperation and Development (USDA/OICD) meet annually to negotiate a program of scientific and technical exchange activities.

The Ministry of Agriculture and USDA share costs of the exchanges on a "receiving-side-pays" basis. Under this arrangement, the international airfare of each scientist is paid by his/her home country and costs abroad are paid for by foreign hosts. OICD requires that the international travel costs of exchange activities be covered by the scientists' sponsoring institution. U.S. participants are selected based on proposals submitted to OICD by scientists in the U.S. Department of Agriculture, universities, and private organizations. Proposals are reviewed on the basis of technical merit and benefit to the United States.

Under the U.S.-P.R.C. agricultural exchange program, USDA aims to create a program which reflects U.S. agricultural priorities, enhances overall relations between USDA and the Ministry of Agriculture, and creates a positive atmosphere for agricultural trade.

CURRENT ACTIVITIES

During the December 1987 U.S.-P.R.C. Joint Working Group Meeting, 10 teams of U.S. scientists were selected to travel to the PRC and 10 teams of Chinese scientists were chosen to visit the United States. U.S. exchanges include a team on Soybean Produc-

tion and Genetic Resources which will travel to the PRC in August 1988. In accordance with the objectives of this team, the first official soybean germ plasm exchange between the United States and the PRC since 1983 took place in April 1988. The 28 soybean lines received from the PRC and the 28 U.S. cultivars sent to China are being used in a joint research project to compare the performance of United States and Chinese cultivars grown in similar environments in both countries. Seven sites in each country were chosen for the research project.

This soybean cultivar evaluation will provide valuable information to researchers on the capacity for disease and insect resistance of Chinese cultivars and the factors affecting adaptation of Chinese cultivars to different environments in similar latitudes. In addition, this and future germ plasm exchanges will benefit U.S. soybean research and production as a result of the new genetic resources available from the expanded germ plasm base.

Other U.S. exchanges include a team on PRC trade and agricultural policy; an APHIS/ARS team on corn seed diseases; and an APHIS/University of California, Davis team on the comparison of regulations for importing and exporting livestock and embryos.

Chinese exchanges include teams on the utilization of post-fire timber; plant quarantine information and techniques; and market organizations for farm products and services.

Agricultural Briefing Material

(Prepared by the U.S. Department of State and U.S. Department of Agriculture)

Question. What are the prospects for China's agriculture?

From 1971 to 1978, the gross value of agricultural output (GVAO) in constant 1980 prices expanded at an annual rate of 4.2 percent. In the reform period of 1979–1984, GVAO grew by 9 percent. The rapid growth rate in the reform period resulted primarily from changes in farm structure and incentive systems which gave private farmers more leeway in growing and selling their crops. Since 1985, however, the growth in agricultural output has slowed due to a variety of economic factors (e.g., weather and changes in market prices).

Over the long term, agricultural reforms are expected to result in continuing improvements in resource efficiency. The output growth rate in the 1990's is likely to be above the long-term rate of 4.2 percent but will probably be below the high rates achieved during the early reform period.

China's statisticians categorize agricultural output in five subsectors: crops, livestock, forestry, fisheries, and sideline production. With regard to crop prospects, USDA expects only modest growth. The percentage of area sown with grain crops is expected to decline from about 80 percent of total in 1978 to around 76 percent of total by the year 2000. Area sown with economic crops such as cotton, sugar and oilseeds will expand. USDA's assessment is that grain production will be just over 500 million tons by the year 2000.

China's livestock industry will change substantially in the next 12 years. Feed grain shortages will continue to limit the expansion

of the industry. Political leaders will implement programs to get farmers to use animals which can efficiently convert grain to meat such as poultry, rabbits and fish. Beef and pork production will grow more slowly. Large blocks of scarce foreign exchange are unlikely to be used for feed grain imports.

China's forestry industry will continue to grow at a slow pace similar to that in past years.

China's aquatic industry is expected to grow rapidly in the next decade. Marine fishing will expand and considerable effort will be made to increase fish output from fresh water ponds.

Sidelines production, which includes things such as grain and oilseed processing, manufacturing, mining and transportation, will likely be the fastest growing subsector.

Question. Will China once again become a major importer of grain and agricultural products?

From 1988 to 2000, China is expected to be a net grain importer. China probably will import sizable quantities of wheat to meet the needs of urban consumers along the coast and inland waterways. China is also expected to import some barley for brewing and corn for livestock feeding operations near coastal urban centers. Exports of corn from the northeast and rice from south China should continue. USDA expects that by the year 2000 China will be feeding around 130 million tons of grain to livestock. Per capita grain consumption should rise very slowly because a large portion of the increased grain production will be allocated for feed use.

China will continue to be a major exporter of raw cotton and other fiber crops. The quality of its raw cotton exports likely will be improved as its plant scientists develop improved varieties.

China currently exports some oilseed products such as soybeans and soybean products. USDA assumes that the demand for feedstuffs will be so great in the future that these materials will be consumed at home and exports will decrease.

USDA assumes that in the next 12 years China will produce for export an increasing variety and quantity of canned fruits and vegetables. The food processing industry is expanding rapidly, and an abundance of rural laborers seems likely to produce a very competitive fruits and vegetable industry.

Question. How extensive has decollectivization been?

As constituted in 1980, communes encompassed a structure of party committees and branches, government units, police, militia, schools, hospitals, day care centers, cinemas, libraries, rural industries, transportation departments, retail stores, grain purchasing stations, production brigades, and production teams. Production teams were the basic farm units which made economic decisions, distributed income, and calculated profits or losses.

The Government dissolved more than 95 percent of the communes between 1982 and 1984. Production teams were disbanded and economic cooperatives were formed with the former production brigade as the primary base. Ownership of assets and land was transferred from production teams to economic cooperatives. Those economic cooperatives manage collectively owned enterprises, oversee collectively owned assets, arrange for farmers to work on community road and irrigation projects, and ensure that farmers comply with state policies and programs. These cooperatives made

long-term contracts with farm households to cultivate designated plots of ground, with the households determining the bulk of production.

Before the break-up of the commune system, cadres had considerable power to control all aspects of peasant life. Now the power of the cadres to control peasant life has been reduced sharply. Nonetheless much of the control system in rural areas remains intact as many parts of the old system were not destroyed, but were reshuffled into new institutions. The party danwei, or basic unit, continues to be an important institution in rural China.

In the post-commune period, farmers as before do not own the land they work. But they do own their homes and courtyards and now they can buy draft animals, purchase trucks and tractors, and can invest funds in their own enterprises.

The new household contract system produced strong incentives as families were permitted to raise income through initiative, hard work, good management, wise use of technology, and reduction of production costs. The system gave families a new stake in the rural economy. It allowed them considerable freedom to make basic economic decisions, allocate their own labor force and arrange their own work schedules.

Question. What are the modernization needs of China's agricultural economy?

PRICE REFORMS

Price mechanisms will become increasingly important in solving economic problems in the agricultural sector. Price reforms need to be implemented which will have an important impact on the efficiency and long-term growth of the agricultural sector.

FACTORS OF MOBILITY

New land contract regulations are needed which would permit farmers to adjust land holdings to obtain more efficient-sized farm production units. Government authorities need to eventually allow limited capital markets to function. The current policy on rural labor mobility should continue. Farm managers need better access to domestic and international price, production, and trade data and they can likely benefit from continuing current rural labor mobility policies.

INVESTMENT

Total net investment in the agricultural sector needs to be increased, but the sector will continue to have less investment priority than the heavy and light industrial sectors. Farm households invested large amounts of capital in housing during the past 10 years, but that initial surge should slow. Farmers will invest in agricultural production if the reformers can provide a proper investment climate.

FERTILIZER

Greater output of chemical fertilizer will be required. A better balance of fertilizers needs to be produced.

IMPROVED SEED AND LIVESTOCK VARIETIES

To make these improvements, China must have good contacts with the international scientific community. Through these contacts and the work of its own scientists, China should be able to import and produce seeds and livestock varieties that will boost output. The use of hybrid seed varieties for corn, rice, and sorghum, in particular, needs to be expanded.

ENERGY

Rural energy shortages will continue to be a serious problem. Electrical power generation capacity for rural areas needs to be expanded.

TRANSPORTATION AND COMMUNICATION

The government at all levels needs to allocate resources to improve transportation facilities. Local governments need to build more feeder roads in rural areas. The provincial and national government need to build main highways and railroad lines, and improve the telephone and telegraph systems.

RURAL INDUSTRY

Output from rural industry should continue to expand, but at a slower rate than in the past 10 years. Food processing industries are expected to expand and this expansion should help reduce crop and livestock product losses.

WATER CONTROL

Beijing needs to continue to develop large hydroelectric and water control projects, leaving local governments the responsibility to construct small hydroplants. Local governments need to continue to use the rural labor force to maintain and construct water control facilities.

TECHNOLOGY

Technicians and farmers are increasing their use of scientific methods in the feeding and care of livestock.

Question. To what extent can the United States supply these needs?

The United States has the technology, equipment, and products which can help the PRC increase agricultural output. A more liberalized trade and investment policy on China's part would likely make these inputs more accessible to China.

The United States has encouraged U.S. firms to compete with Chinese and foreign competitors to supply agricultural products and inputs such as fertilizers, pesticides, and machinery. The United States has also encouraged China to participate in the United Nations and affiliated institutions such as the Food and Agricultural Organization, the World Bank, and GATT.

We welcome delegations from the PRC to study how our commodity markets function and how our National Agricultural Statistical Service produces data for farm managers, government administrators, and officers of firms in food and fiber industries. In addi-

tion, Chinese students and scientists are studying advanced agricultural R&D techniques in U.S. universities; U.S. scientists are exchanging important research findings with colleagues in China.

Question. What are the prospects for U.S. farm exports to China as agricultural modernization proceeds?

USDA expects that U.S. agricultural trade with China will expand as modernization proceeds. China's domestic demand for wheat will rise because of population increases and increases in per capita income. China likely wil be importing about 20 million tons of wheat by the year 2000. Demand for feed stuffs will also increase and USDA expects that limited quantities of corn, barley, and soybeans will be exported to China in the next decade.

The USDA expects that China will become a fierce competitor in some markets in the coming decade. China can be expected to be a major participant in world rice and cotton markets. China likely will export meat and poultry products to Pacific rim markets. In the next decade, China's food processing industries will expand sharply and frozen and canned foods will be exported in increasing quantities.

For fiscal 1987–88, it is expected that the value of U.S. shipments probably will exceed $400 million, well above the $234 million of 1986–87 and $87 million of 1985–86. There should be continued improvement in U.S. agricultural exports to China in 1988.

Question. Is U.S. agriculture geared to take advantage of market possibilities in China?

Private agricultural firms likely will continue to be sensitive to market possibilities in China. They have been responsive in past years and competition will keep them active in the China market.

Various agencies in USDA have geared up to handle the work in China. The Economic Research Service continues to improve its analysis of developments in China and participates in the World Agricultural Outlook Board to produce current estimates of China's agricultural production and trade for the general public. The Foreign Agricultural Service (FAS) maintains officers in Beijing, Guangzhou and Hong Kong which report on developments in production and trade. FAS also provides information and contacts on market prospects in China for U.S. exporters. USDA "Cooperators" such as Wheat Associates, the U.S. Feed Grain Council, and the American Soybean Association have officers in Beijing who are promoting the sale of U.S. farm products.

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